



Analysis of Regions Not Currently Involved in WIRED Grants or RIGs: BEA Region 161

October 2008

BEA Region 161

Bedford County, Pennsylvania
Blair County, Pennsylvania
Cambria County, Pennsylvania
Cameron County, Pennsylvania
Centre County, Pennsylvania
Clearfield County, Pennsylvania
Elk County, Pennsylvania
Huntingdon County, Pennsylvania
Jefferson County, Pennsylvania
Mifflin County, Pennsylvania
Somerset County, Pennsylvania

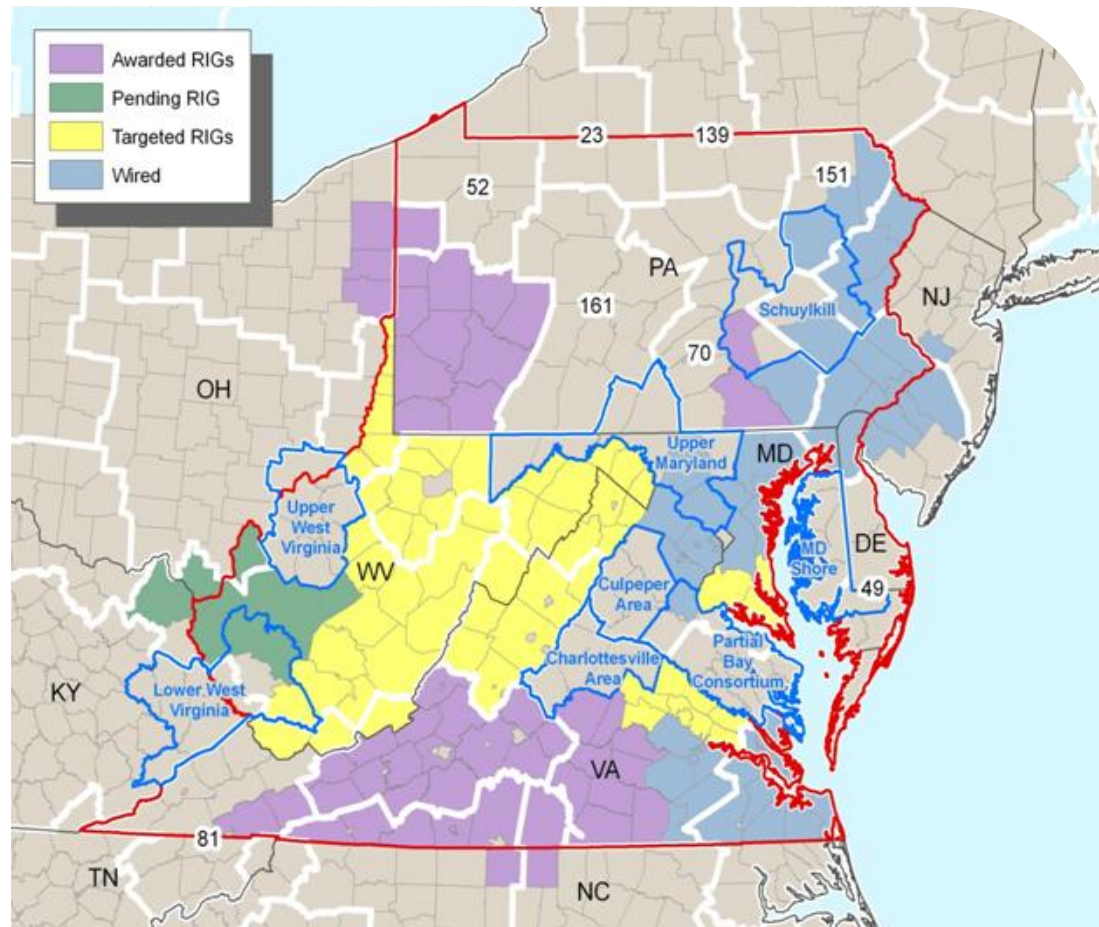




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About This Report

Chmura Economics & Analytics recognizes that accurate, timely data can be difficult to find. This regional report provides employment, wages, occupations, and skills data that can be used as background for an RIG application.

Frequently Asked Questions

What data sources were utilized in the creation of this report?

The data for this report come from a variety of sources. All data are checked, cleaned, combined, organized, and displayed in a way to maximize its usefulness. Yearly employment data in the below charts are based on four-quarter averages. Data for regions outside of Virginia and Ohio are imputed when not disclosed. A few of the sources of data which have been used in the creation of this report are:

- Quarterly Census of Employment and Wages (QCEW)
- Local Area Unemployment Statistics (LAUS)
- Occupation and Industry Forecasts
- Local Employment Dynamics (LED)
- O*Net
- National Center for Education Statistics
- Occupational Employment Statistics (OES)

Who is Chmura Economics & Analytics?

Chmura Economics & Analytics (Chmura) is a provider of applied economic consulting, quantitative research, and software solutions requiring the integration of advanced economic analysis. Chmura publishes *Virginia Economic Trends*, *Ohio Economic Trends*, electronic publications, and forecasts available via www.chmuraecon.com. Software products include JOBSeq®, WIBeq™, and OnStage.

Chmura has headquarters in Richmond, Virginia and a branch office in Cleveland, Ohio. Chmura Economics & Analytics is committed to achieving 100% customer satisfaction in all project engagements. The Chmura philosophy is that when our customer succeeds, Chmura has been successful. To contact us, send an email to info@chmuraecon.com.

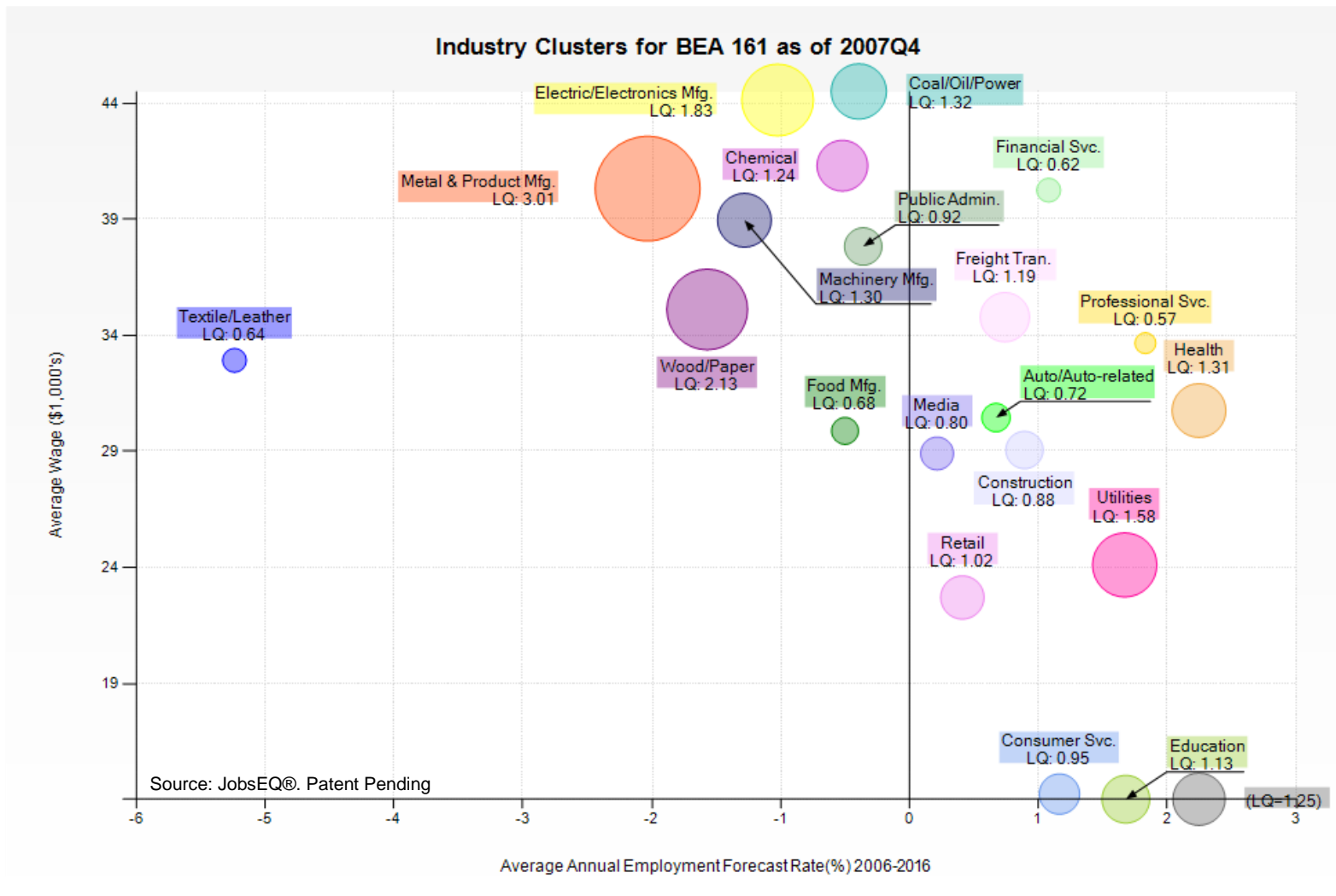


Executive Summary

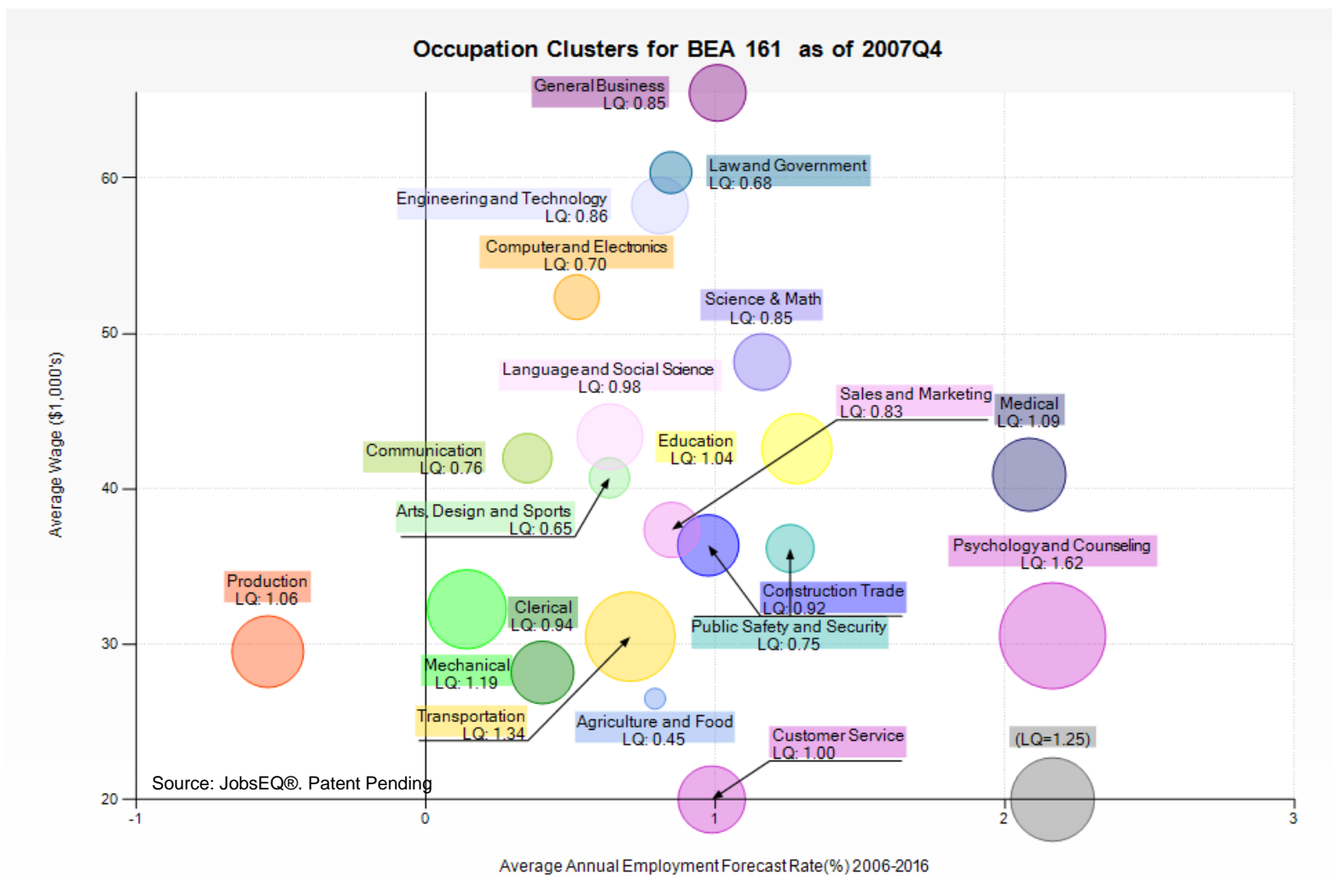
BEA Region 161 in Pennsylvania is weighted toward traditional manufacturing industries that are expected to continue to shed jobs. Moreover, the region is experiencing losses in support industries such as retail and education services which suggest the region is at risk of a more persistent overall decline in employment. The largest industry clusters in the region are all manufacturing: metal and products, wood/paper, electric/electronics, machinery, and chemicals. Associated clusters of production and mechanical occupations suggest retraining will be necessary to employ workers in demand occupations. The largest occupation deficits in the region are expected to be healthcare related.



Industry and Occupation Clusters



Note: See the appendix for an explanation of how to use industry and occupation cluster charts.



Employment by Major Sector

Bureau of Economic Analysis Region 161 Employment by Major Sector

NAICS	Industry Description	Employment				Employment Change Since 2005		Annual Average Change Since 2002
		2007	2005	2002	Annual Average Wages 2007	Number	Annual Average	
0	Total	321,529	316,977	314,451	\$ 31,632	4,552	0.7%	0.4%
11	Agriculture, Forestry, Fishing and Hunting	1,194	1,268	1,245	\$ 14,816	(74)	-2.9%	-0.8%
21	Mining, Quarrying, and Oil and Gas Extraction	2,737	2,441	2,607	\$ 41,617	296	5.9%	1.0%
22	Utilities	2,311	2,312	2,552	\$ 34,760	(1)	0.0%	-2.0%
23	Construction	16,319	16,506	13,982	\$ 28,119	(187)	-0.6%	3.1%
31	Manufacturing	45,708	46,945	52,614	\$ 38,166	(1,237)	-1.3%	-2.8%
42	Wholesale Trade	9,709	9,244	8,718	\$ 37,175	466	2.5%	2.2%
44	Retail Trade	42,571	43,032	43,667	\$ 19,100	(461)	-0.5%	-0.5%
48	Transportation and Warehousing	18,409	15,929	17,516	\$ 28,667	2,480	7.5%	1.0%
51	Information	5,027	4,992	5,382	\$ 33,356	35	0.4%	-1.4%
52	Finance and Insurance	8,840	8,710	9,148	\$ 39,648	130	0.7%	-0.7%
53	Real Estate and Rental and Leasing	2,533	2,660	2,789	\$ 26,003	(127)	-2.4%	-1.9%
54	Professional, Scientific, and Technical Services	11,434	11,050	9,660	\$ 42,438	384	1.7%	3.4%
55	Management of Companies and Enterprises	2,833	2,404	2,300	\$ 47,092	430	8.6%	4.3%
56	Administrative and Support and Waste Management and Remediation Services	10,413	10,432	9,339	\$ 19,236	(19)	-0.1%	2.2%
61	Educational Services	31,764	32,607	28,934	\$ 13,803	(843)	-1.3%	1.9%
62	Health Care and Social Assistance	53,303	50,261	48,262	\$ 30,070	3,042	3.0%	2.0%
71	Arts, Entertainment, and Recreation	4,311	4,052	3,607	\$ 9,571	259	3.1%	3.6%
72	Accommodation and Food Services	26,209	25,396	25,510	\$ 11,116	813	1.6%	0.5%
81	Other Services (except Public Administration)	9,955	10,120	9,875	\$ 17,855	(166)	-0.8%	0.2%
92	Public Administration	15,911	16,566	16,501	\$ 37,071	(655)	-2.0%	-0.7%

Employment growth is the broadest and most timely indicator of the general health of an economy.

Information obtained from this table provides insight to questions such as:

- Which industries are posting the largest increases or decreases in employment? What are their average wages—will the trend lead to a decrease or increase in the region's overall wealth?
- Are changes in employment levels cyclical or is a particularly industry in long-term decline? What is driving that trend?

Top 20 Employers by 3-Digit NAICS

Bureau of Economic Analysis Region 161 Top 20 Employers by 3-Digit NAICS

NAICS	Industry Description	Employment			Annual Aver Wages 2007	Employment Change Since 2005		Annual Aver Change Since 2002
		2007	2005	2002		Number	Annual Average	
611	Educational Services	31,764	32,607	28,934	\$ 13,803	(843)	-1.3%	1.9%
722	Food Services and Drinking Places	22,048	21,408	20,934	\$ 10,518	641	1.5%	1.0%
622	Hospitals	14,626	15,090	15,748	\$ 34,765	(464)	-1.6%	-1.5%
621	Ambulatory Health Care Services	14,127	13,085	11,745	\$ 30,937	1,042	3.9%	3.8%
623	Nursing and Residential Care Facilities	12,608	12,245	12,631	\$ 24,843	363	1.5%	0.0%
624	Social Assistance	11,941	9,841	8,155	\$ 28,682	2,100	10.2%	7.9%
541	Professional, Scientific, and Technical Services	11,434	11,050	9,660	\$ 42,438	384	1.7%	3.4%
332	Fabricated Metal Product Manufacturing	10,337	10,019	10,276	\$ 36,272	318	1.6%	0.1%
561	Administrative and Support Services	9,242	9,375	8,038	\$ 18,281	(133)	-0.7%	2.8%
452	General Merchandise Stores	8,943	8,397	8,033	\$ 16,752	546	3.2%	2.2%
445	Food and Beverage Stores	8,864	9,532	10,919	\$ 13,604	(668)	-3.6%	-4.1%
921	Executive, Legislative, and Other General Government Support	7,586	9,058	8,776	\$ 28,419	(1,471)	-8.5%	-2.9%
238	Specialty Trade Contractors	6,759	7,108	6,458	\$ 32,714	(350)	-2.5%	0.9%
237	Heavy and Civil Engineering Construction	5,852	5,593	3,527	\$ 20,583	259	2.3%	10.7%
922	Justice, Public Order, and Safety Activities	5,554	5,093	5,098	\$ 46,081	461	4.4%	1.7%
484	Truck Transportation	5,447	5,431	5,331	\$ 35,917	16	0.2%	0.4%
423	Merchant Wholesalers, Durable Goods	5,259	4,679	4,602	\$ 36,562	580	6.0%	2.7%
522	Credit Intermediation and Related Activities	5,135	5,173	5,594	\$ 32,279	(38)	-0.4%	-1.7%
334	Computer and Electronic Product Manufacturing	5,005	4,969	5,653	\$ 42,907	37	0.4%	-2.4%
441	Motor Vehicle and Parts Dealers	4,958	5,273	5,243	\$ 29,373	(315)	-3.0%	-1.1%

The **North American Industry Classification System** (NAICS) was developed cooperatively between the United States, Canada, and Mexico to provide data users with accurate information pertaining to the economy in the 21st century. The NAICS Code is composed of six digits. The first two digits define the top-level category. The three-digit industries shown above represent components of the major sectors.

Similar to the previous table, information obtained from this table provides insight to questions such as:

- Which industries are posting the largest increases or decreases in employment? What are their average wages—will the trend lead to a decrease or increase in the region's overall wealth?
- Are changes in employment levels cyclical or is a particularly industry in long-term decline? What is driving that trend?

Industries with Largest Employment Gains and Losses

Bureau of Economic Analysis Region 161 Top 20 Industries with Largest Employment Gain by 3-Digit NAICS

NAICS	Industry Description	Employment			Annual Aver Wages 2007	Employment Change Since 2005		
		2007	2005	2002		Number	Annual Average	Annual Aver Change Since 2002
624	Social Assistance	11,941	9,841	8,155	\$ 28,682	2,100.01	10.2%	7.9%
493	Warehousing and Storage	3,875	2,318	1,527	\$ 23,909	1,556.56	29.3%	20.5%
621	Ambulatory Health Care Services	14,127	13,085	11,745	\$ 30,937	1,041.98	3.9%	3.8%
488	Support Activities for Transportation	1,789	870	3,318	\$ 17,442	918.74	43.4%	-11.6%
722	Food Services and Drinking Places	22,048	21,408	20,934	\$ 10,518	640.85	1.5%	1.0%
423	Merchant Wholesalers, Durable Goods	5,259	4,679	4,602	\$ 36,562	580.19	6.0%	2.7%
452	General Merchandise Stores	8,943	8,397	8,033	\$ 16,752	545.64	3.2%	2.2%
922	Justice, Public Order, and Safety Activities	5,554	5,093	5,098	\$ 46,081	461.05	4.4%	1.7%
551	Management of Companies and Enterprises	2,833	2,404	2,300	\$ 47,092	429.60	8.6%	4.3%
623	Nursing and Residential Care Facilities	12,608	12,245	12,631	\$ 24,843	362.76	1.5%	0.0%
322	Paper Manufacturing	3,177	2,823	2,768	\$ 45,068	354.03	6.1%	2.8%
332	Fabricated Metal Product Manufacturing	10,337	10,019	10,276	\$ 36,272	317.77	1.6%	0.1%
237	Heavy and Civil Engineering Construction	5,852	5,593	3,527	\$ 20,583	259.19	2.3%	10.7%
213	Support Activities for Mining	749	538	412	\$ 39,035	211.12	18.0%	12.7%
711	Performing Arts, Spectator Sports, and Related Industries	639	430	397	\$ 15,934	208.99	21.9%	10.0%
925	Administration of Housing Programs, Urban Planning, and Community Develop	635	457	406	\$ 44,265	178.22	17.9%	9.3%
923	Administration of Human Resource Programs	409	233	387	\$ 45,700	175.82	32.4%	1.1%
721	Accommodation	4,158	3,988	4,576	\$ 14,412	169.71	2.1%	-1.9%
511	Publishing Industries (except Internet)	1,810	1,657	1,579	\$ 35,245	152.91	4.5%	2.8%
524	Insurance Carriers and Related Activities	3,190	3,046	3,031	\$ 46,158	143.20	2.3%	1.0%

Information obtained from the table above identifies the industries that are adding the largest number of jobs which translates into those creating the greatest demand for new workers.

Bureau of Economic Analysis Region 161 Top 20 Industries with Largest Employment Loss by 3-Digit NAICS

NAICS	Industry Description	Employment			Employment Change Since 2005			Annual Average Change Since 2002
		2007	2005	2002	Annual Average Wages 2007	Number	Annual Average	
921	Executive, Legislative, and Other General Government Support	7,586	9,058	8,776	\$ 28,419	(1,471)	-8.5%	-2.9%
445	Food and Beverage Stores	8,864	9,532	10,919	\$ 13,604	(668)	-3.6%	-4.1%
321	Wood Product Manufacturing	3,770	4,367	4,448	\$ 27,112	(597)	-7.1%	-3.3%
327	Nonmetallic Mineral Product Manufacturing	2,381	2,709	3,638	\$ 43,324	(328)	-6.2%	-8.1%
441	Motor Vehicle and Parts Dealers	4,958	5,273	5,243	\$ 29,373	(315)	-3.0%	-1.1%
446	Health and Personal Care Stores	2,874	3,176	3,147	\$ 26,710	(302)	-4.9%	-1.8%
814	Private Households	189	466	512	\$ 13,982	(277)	-36.3%	-18.1%
323	Printing and Related Support Activities	1,197	1,378	1,523	\$ 30,543	(181)	-6.8%	-4.7%
481	Air Transportation	96	262	637	\$ 31,162	(165)	-39.3%	-31.4%
325	Chemical Manufacturing	576	738	1,340	\$ 41,373	(163)	-11.7%	-15.6%
331	Primary Metal Manufacturing	2,493	2,624	2,621	\$ 46,193	(131)	-2.5%	-1.0%
447	Gasoline Stations	4,139	4,249	4,009	\$ 14,682	(110)	-1.3%	0.6%
324	Petroleum and Coal Products Manufacturing	112	214	320	\$ 35,955	(102)	-27.6%	-18.9%
425	Wholesale Electronic Markets and Agents and Brokers	814	913	698	\$ 36,497	(99)	-5.6%	3.1%
236	Construction of Buildings	3,708	3,805	3,995	\$ 31,587	(97)	-1.3%	-1.5%
515	Broadcasting (except Internet)	630	726	790	\$ 32,151	(95)	-6.8%	-4.4%
811	Repair and Maintenance	2,629	2,723	2,629	\$ 26,669	(94)	-1.7%	0.0%
532	Rental and Leasing Services	1,101	1,166	1,173	\$ 23,432	(65)	-2.8%	-1.3%
491	Postal Service	1,868	1,929	1,834	\$ 45,361	(61)	-1.6%	0.4%
115	Support Activities for Agriculture and Forestry	134	191	187	\$ 445	(56)	-16.0%	-6.4%

Information obtained from the table above identifies the industries that are shedding the largest number of workers which translates into the number of people who are likely looking for jobs in the region or in need of retraining.

Declining Occupations

Bureau of Economic Analysis Region 161 Top 20 Declining Occupations Based on Top 20 Declining Industries

Occupation Description	SOC	Employment			Annual Aver Wages 2007	Employment Change Since 2005		Annual Aver Change Since 2002
		2007	2005	2002		Number	Annual Average	
Cashiers	41-2011	5,950	6,275	6,507	\$ 17,283	(326)	-2.6%	-1.8%
Retail Salespersons	41-2031	2,087	2,280	2,365	\$ 29,431	(193)	-4.3%	-2.5%
Police and Sheriff's Patrol Officers	33-3051	632	753	730	\$ 46,320	(122)	-8.4%	-2.8%
Automotive Service Technicians and Mechanics	49-3023	1,762	1,882	1,876	\$ 34,512	(120)	-3.2%	-1.2%
Truck Drivers, Heavy and Tractor-Trailer	53-3032	565	681	715	\$ 32,655	(117)	-9.0%	-4.6%
Laborers and Freight, Stock, and Material Movers, Hand	53-7062	889	1,003	1,095	\$ 22,201	(114)	-5.9%	-4.1%
Carpenters	47-2031	1,388	1,487	1,525	\$ 37,294	(100)	-3.4%	-1.9%
Stock Clerks and Order Fillers	43-5081	1,646	1,742	1,931	\$ 20,855	(96)	-2.8%	-3.1%
General and Operations Mgrs	11-1021	979	1,072	1,123	\$ 84,199	(93)	-4.4%	-2.7%
First-Line Supervisors/Mgrs of Retail Sales Workers	41-1011	1,298	1,382	1,427	\$ 38,289	(84)	-3.1%	-1.9%
Team Assemblers	51-2092	424	506	617	\$ 25,023	(82)	-8.5%	-7.2%
Office Clerks, General	43-9061	762	844	876	\$ 23,689	(82)	-5.0%	-2.7%
Secretaries, Ex Legal, Medical, and Executive	43-6014	739	816	837	\$ 26,818	(77)	-4.9%	-2.5%
Personal and Home Care Aides	39-9021	51	124	136	\$ 16,633	(73)	-35.8%	-17.8%
Correctional Officers and Jailers	33-3012	360	429	416	\$ 36,408	(70)	-8.5%	-2.9%
Sales Representatives, Wholesale and Mfg, Ex Technical and Scientific Products	41-4012	556	623	623	\$ 53,992	(68)	-5.6%	-2.3%
Truck Drivers, Light or Delivery Services	53-3033	642	706	740	\$ 22,992	(65)	-4.7%	-2.8%
Maintenance and Repair Workers, General	49-9042	523	585	650	\$ 34,461	(62)	-5.5%	-4.3%
Helpers--Production Workers	51-9198	373	433	476	\$ 22,973	(60)	-7.2%	-4.8%
Bookkeeping, Accounting, and Auditing Clerks	43-3031	619	678	714	\$ 28,696	(60)	-4.5%	-2.8%

The **Standard Occupational Classification** (SOC) system is used by all Federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. All workers are classified into one of over 820 occupations according to their occupational definition. Each occupation group includes detailed occupation(s) requiring similar job duties, skills, education, or experience. This system is provided by the U.S. Department of Labor, Bureau of Labor Statistics.

The table above identifies the most prevalent occupations in the regional industries shedding the most workers over the past year. The occupations on this list identify those that are in need of retraining or transferring to other industries.

Bureau of Economic Analysis Region 161 Top 20 Declining Occupations Based on All Industries

Occupation Description	SOC	Employment			Annual Aver Wages	Employment		Annual Aver Change Since 2002 Q4	
		2007 Q4	2006 Q4	2002 Q4		2007 Q4	Number		Percent
Elementary School Teachers, Except Special Education	25-2021	4,427	4,530	4,320	\$ 45,654	(102)	-2.3%	0.5%	
Sewing Machine Operators	51-6031	246	341	1,002	\$ 19,469	(95)	-27.8%	-24.5%	
Secondary School Teachers, Except Special and Vocational Education	25-2031	3,704	3,792	3,624	\$ 48,441	(88)	-2.3%	0.4%	
Construction Laborers	47-2061	2,587	2,656	2,086	\$ 30,560	(69)	-2.6%	4.4%	
Carpenters	47-2031	2,165	2,230	2,175	\$ 37,910	(65)	-2.9%	-0.1%	
Operating Engineers and Other Construction Equipment Operators	47-2073	1,730	1,779	1,363	\$ 39,126	(49)	-2.8%	4.9%	
Telecommunications Line Installers and Repairers	49-9052	193	241	279	\$ 43,364	(48)	-19.9%	-7.1%	
Cashiers	41-2011	10,989	11,036	10,926	\$ 17,236	(46)	-0.4%	0.1%	
Pharmacy Technicians	29-2052	641	682	676	\$ 24,905	(41)	-6.0%	-1.1%	
Bus Drivers, School	53-3022	3,307	3,348	2,810	\$ 24,625	(41)	-1.2%	3.3%	
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	51-7042	415	456	488	\$ 23,585	(40)	-8.9%	-3.2%	
Pharmacists	29-1051	574	613	601	\$ 84,698	(39)	-6.4%	-0.9%	
Middle School Teachers, Except Special and Vocational Education	25-2022	1,578	1,616	1,543	\$ 46,535	(37)	-2.3%	0.4%	
Teacher Assistants	25-9041	2,881	2,915	2,693	\$ 20,165	(34)	-1.2%	1.4%	
Team Assemblers	51-2092	2,896	2,928	3,281	\$ 25,826	(32)	-1.1%	-2.5%	
Printing Machine Operators	51-5023	465	490	540	\$ 32,254	(25)	-5.1%	-3.0%	
Machine Feeders and Offbearers	53-7063	582	606	697	\$ 24,173	(23)	-3.8%	-3.5%	
Sawing Machine Setters, Operators, and Tenders, Wood	51-7041	262	283	309	\$ 24,300	(21)	-7.5%	-3.3%	
Automotive Service Technicians and Mechanics	49-3023	2,131	2,152	2,436	\$ 34,122	(21)	-1.0%	-2.6%	
Network Systems and Data Communications Analysts	15-1081	156	176	172	\$ 62,308	(20)	-11.2%	-1.9%	

The table above identifies the most prevalent occupations that are declining from ALL industries in the region. The occupations on this list identify those that are in need of retraining or transferring to other industries.

Growing Occupations

Bureau of Economic Analysis Region 161 Top 20 Growing Occupations Based on All Industries

Occupation Description	SOC	Employment			Annual Aver Wages 2007 Q4	Employment Change		Annual Aver Change Since 2002 Q4
		2007 Q4	2006 Q4	2002 Q4		Number	Percent	
Industrial Truck and Tractor Operators	53-7051	2,370	2,152	1,960	\$ 28,090	218	10.1%	3.9%
Laborers and Freight, Stock, and Material Movers, Hand	53-7062	5,105	4,905	4,808	\$ 23,175	200	4.1%	1.2%
Waiters and Waitresses	35-3031	6,345	6,251	6,068	\$ 15,900	94	1.5%	0.9%
Telecommunications Equipment Installers and Repairers, Except Line Installers	49-2022	334	251	275	\$ 48,522	83	33.3%	4.0%
Home Health Aides	31-1011	1,791	1,718	1,314	\$ 18,687	73	4.3%	6.4%
Truck Drivers, Light or Delivery Services	53-3033	2,906	2,834	2,961	\$ 25,439	72	2.5%	-0.4%
Truck Drivers, Heavy and Tractor-Trailer	53-3032	6,282	6,211	6,782	\$ 34,026	72	1.2%	-1.5%
Personal and Home Care Aides	39-9021	1,775	1,711	1,405	\$ 17,871	64	3.7%	4.8%
Child, Family, and School Social Workers	21-1021	1,444	1,387	1,059	\$ 34,097	57	4.1%	6.4%
Packers and Packagers, Hand	53-7064	2,196	2,140	2,186	\$ 19,742	57	2.7%	0.1%
Social and Human Service Assistants	21-1093	1,180	1,128	879	\$ 24,323	52	4.6%	6.1%
Stock Clerks and Order Fillers	43-5081	4,326	4,277	4,392	\$ 21,664	49	1.1%	-0.3%
Office Clerks, General	43-9061	6,251	6,203	5,902	\$ 23,789	47	0.8%	1.2%
Library Assistants, Clerical	43-4121	415	368	293	\$ 21,338	47	12.7%	7.2%
Retail Salespersons	41-2031	10,114	10,069	10,365	\$ 22,837	46	0.5%	-0.5%
Shipping, Receiving, and Traffic Clerks	43-5071	1,828	1,784	1,792	\$ 26,408	44	2.5%	0.4%
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scien	41-4012	2,768	2,727	2,729	\$ 52,599	41	1.5%	0.3%
Accountants and Auditors	13-2011	1,594	1,556	1,499	\$ 55,449	38	2.4%	1.2%
All other counselors, social and religious workers	21-9099	972	935	699	\$ -	38	4.0%	6.8%
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011	3,109	3,076	3,008	\$ 42,581	34	1.1%	0.7%

The table above identifies the most prevalent occupations that are in demand for the industries in the region that are showing the largest employment growth.

Forecast Occupation Gaps

Bureau of Economic Analysis Region 161 Gaps in Top 20 Occupations (Requiring 2-Year Degree or Greater) Over Next 7 Years

Occupation Description	SOC	Annual Occupation Gaps	Employment			Annual Aver Wages 2007 Q4
			2007 Q4	2006 Q4	2002 Q4	
Registered Nurses	29-1111	171	6,964	6,955	6,918	\$ 53,660
Elementary School Teachers, Except Special Education	25-2021	65	4,427	4,530	4,320	\$ 45,654
Executive Secretaries and Administrative Assistants	43-6011	54	3,039	3,014	2,794	\$ 35,883
Bookkeeping, Accounting, and Auditing Clerks	43-3031	52	3,369	3,350	3,309	\$ 29,356
Licensed Practical and Licensed Vocational Nurses	29-2061	50	2,212	2,201	2,228	\$ 34,857
Teacher Assistants	25-9041	37	2,881	2,915	2,693	\$ 20,165
Social and Human Service Assistants	21-1093	35	1,180	1,128	879	\$ 24,323
Medical Assistants	31-9092	30	938	925	865	\$ 25,308
Child, Family, and School Social Workers	21-1021	29	1,444	1,387	1,059	\$ 34,097
First-Line Supervisors/Managers of Office and Administrative Support Workers	43-1011	26	3,109	3,076	3,008	\$ 42,581
Preschool Teachers, Except Special Education	25-2011	24	1,057	1,030	874	\$ 23,270
Middle School Teachers, Except Special and Vocational Education	25-2022	23	1,578	1,616	1,543	\$ 46,535
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific	41-4012	20	2,768	2,727	2,729	\$ 52,599
Business Operations Specialists, All Other	13-1199	19	1,678	1,689	1,622	\$ 54,743
Accountants and Auditors	13-2011	19	1,594	1,556	1,499	\$ 55,449
Mental Health Counselors	21-1014	18	593	587	490	\$ 33,815
Secondary School Teachers, Except Special and Vocational Education	25-2031	15	3,704	3,792	3,624	\$ 48,441
Correctional Officers and Jailers	33-3012	15	756	769	784	\$ 36,378
Social and Community Service Managers	11-9151	12	502	483	381	\$ 49,404
Mental Health and Substance Abuse Social Workers	21-1023	12	466	456	369	\$ 35,999

The **Gap** forecasts the average annual number of individuals needed in the occupation beyond the supply of new workers. It includes changes due to replacements. For example, consider the case in which a retail salesperson gets a degree, leaves their occupation, and becomes a financial analyst. This turnover dictates that a new retail salesperson is needed. Even though the total number of retail salespersons in the region is unchanged, the gap counts this situation as an increase of one in demand for retail salesperson. It also includes expected changes due to worker preferences and wages.

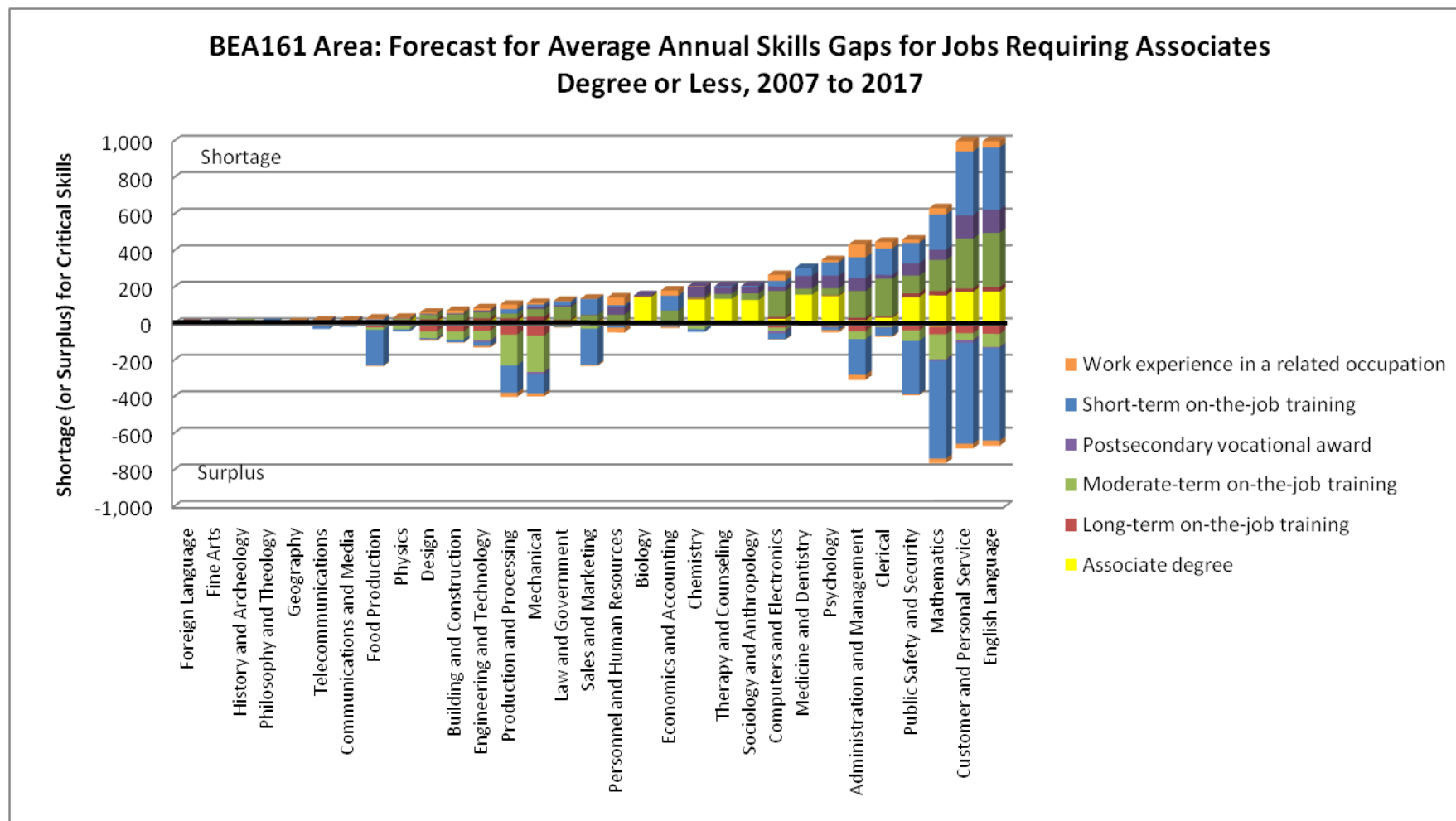
This table provides insight into the occupations that typically require a 2-year degree or greater that are expected to be in greatest demand.

Bureau of Economic Analysis Region 161 Gaps in Top 20 Occupations (Requiring Less than 2-Year Degree) Over Next 7 Years

SOC	Occupation Description	Annual Occupation Gaps	Employment			Annual Aver Wages 2007 Q4
			2007 Q4	2006 Q4	2002 Q4	
43-9061	Office Clerks, General	101	6,251	6,203	5,902	\$ 23,789
41-2031	Retail Salespersons	74	10,114	10,069	10,365	\$ 22,837
39-9021	Personal and Home Care Aides	73	1,775	1,711	1,405	\$ 17,871
31-1011	Home Health Aides	58	1,791	1,718	1,314	\$ 18,687
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	49	5,098	5,083	4,826	\$ 21,146
43-6014	Secretaries, Except Legal, Medical, and Executive	43	5,379	5,360	5,176	\$ 26,730
43-4051	Customer Service Representatives	37	3,274	3,265	3,320	\$ 28,704
43-4171	Receptionists and Information Clerks	35	2,569	2,538	2,360	\$ 22,734
31-1012	Nursing Aides, Orderlies, and Attendants	34	4,284	4,270	4,509	\$ 21,479
53-3032	Truck Drivers, Heavy and Tractor-Trailer	32	6,282	6,211	6,782	\$ 34,026
53-3022	Bus Drivers, School	31	3,307	3,348	2,810	\$ 24,625
33-9032	Security Guards	23	1,267	1,270	1,326	\$ 23,047
53-3033	Truck Drivers, Light or Delivery Services	18	2,906	2,834	2,961	\$ 25,439
41-1011	First-Line Supervisors/Managers of Retail Sales Workers	17	3,057	3,052	3,099	\$ 36,817
29-2041	Emergency Medical Technicians and Paramedics	14	1,066	1,054	1,071	\$ 27,176
43-6013	Medical Secretaries	13	709	702	678	\$ 27,572
29-2052	Pharmacy Technicians	10	641	682	676	\$ 24,905
37-2012	Maids and Housekeeping Cleaners	10	2,047	2,015	2,102	\$ 17,910
37-3011	Landscaping and Groundskeeping Workers	10	1,538	1,520	1,442	\$ 21,980
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	10	4,814	4,813	4,573	\$ 15,526

This table provides insight into the occupations that typically require less than a 2-year degree that are expected to be in greatest demand.

Forecast Skill Needs



The chart above identifies the skills needed for the gap occupations identified on the previous page that typically require less than a 2-year degree.

Appendix: Clusters

Cluster charts display a geographic concentration of interrelated industries or occupations.

- **Cluster**
 - Industry clusters can form and grow because of a region's competitive advantage—resources such as location, trained labor, and education systems.
 - Occupation clusters describe the specialization of a region's workforce.
- **Location Quotient - (LQ)** This value is shown by the size of the circle; the larger the circle, the larger the location quotient.
 - A location quotient greater than 1.0 indicates that the region has a higher concentration of employment in a particular industry or occupation than the nation; a location quotient less than 1 indicates the region has a lower concentration of employment in the cluster than the nation.
 - If a regional industry group has a location quotient of 1.25 or higher, it is considered to possess a *Competitive Advantage* in that industry.
 - Only industries or occupations with an LQ higher than .5 are shown in the clusters chart.
 - Nondisclosure - if cluster data are nondisclosable, a range will be given for the LQ.
- **Average Wages** - This value is shown on the vertical axis. The higher the circle is shown on the chart, the higher the average wages in that cluster.
- **Forecast Growth** - The forecast growth rate for a cluster is the annual average percentage change in employment expected over the given period. This value is shown along the horizontal axis. The further to the right a cluster's circle is shown, the greater the growth expected in that cluster. The expected growth is based upon a long-range national industry and occupation forecast and may not reflect short-term and regional fluctuations.